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54 Coagulation electrode

57 The description pertains to coagulation electrodes for thermal coagulation of biological tissue by means of high-frequency electrical alternating current for which the area adjacent to the contact surface of the coagulation electrodes is formed as a heat sink with a heat-capacity value, and is cooled to such a low temperature that the contact surface during the time interval required for at least one coagulation procedure possesses a temperature within the range whose upper temperature limit is below the ambient temperature of the operating room, and whose lower temperature limit is the freezing point of water. The heat sink may contain a cooling device with a supply and exhaust line for liquid or gaseous coolant. According to an embodiment example (Fig. 6) relating to the application of the invention to a bipolar forceps, metallic tubes (34, 35) that are connected in series via a connecting line (38) of non-conducting plastic provide supply and exhaust of coolant to the area of the two contact surfaces (20, 21).

